From: Flowers, Lynn [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=1A4411C874D041B9A8BADFC32B91BD70-FLOWERS, LYNN]

**Sent**: 10/28/2014 12:30:04 PM

To: Olden, Kenneth [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=8979224c77ea4d559f70cab1688f28aa-Olden, Kenneth]; Gatchett, Annette

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=f12d699a71f84e21bddbb876dae7f96c-Gatchett, Annette]; Bussard, David

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=cf26b876393e44f38bdd06db02dbbfe5-Bussard, David]; Vandenberg, John

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=dcae2b98a04540fb8d099f9d4dead690-Vandenberg, John]; Cogliano, Vincent

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=51f2736376ac4d32bad2fe7cfef2886b-Cogliano, Vincent]; Perovich, Gina

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=6e3c19d7f4db41bfa2477aa27ad83945-Perovich, Gina]; Troyer, Michael

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=847b0020dd0e457e85f994a1ad64b26d-Troyer, Michael]; Sams, Reeder

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=7d5b479ccd894cea99ae55df20de6971-Sams, Reeder]; Walsh, Debra

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=d4fd965338fc4d449c2954945c41de46-Walsh, Debra]; Rom, William

[/o=ExchangeLabs/ou=Exchange Administrative Group]

(FYDIBOHF23SPDLT)/cn=Recipients/cn=3d641f33ca8a4664ae9099d1c9bdd5e5-Rom, Willia]; D'Amico, Louis

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=78a91f83c4414910be286efe02004dbc-D'Amico, Louis J.]

CC: White, Paul [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=4e179825823c44ebbb07a9704e1e5d16-White, Paul]; Frithsen, Jeff

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=e3743bd6f3c345baaae407c1d6f78e92-FRITHSEN, JEFF]; Ross, Mary

[/o=ExchangeLabs/ou=Exchange Administrative Group

 $(FYDIBOHF23SPDLT)/cn=Recipients/cn=98359cd1f66f46ec91d327e99a3c6909-Ross,\ Mary];\ Birchfield,\ Norman (FYDIBOHF23SPDLT)/cn=Recipients/cn=98359cd1f66f46ec91d327e99a3c6909-Ross,\ Mary];\ Birchfield,\ Mary (FYDIBOHF23SPDLT)/cn=Recipients/cn=98359cd1f66f46ec91d327e99a3c6909-Ross,\ Mary (FYDIBOHF25SPDLT)/cn=Recipients/cn=98359cd1f66f46ec91d327e99a3c6909-Ross,\ Mary (FYDIBOHF25SPDLT)/cn=Recipients/cn=98359cd1f66f46ec91d327e99a3c6909-Ross,\ Mary (FYDIBOHF25SPDLT)/cn=Recipients/cn=98359c0909-Ross,\ Mary (FYDIBOHF25SPDLT)/cn=88359c09-Ross,\ Mary (FYDIBOHF25SP$ 

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=c910f2fd28414e819b6afe6dda525e9f-Birchfield, Norman]; Berner, Ted

[/o=ExchangeLabs/ou=Exchange Administrative Group]

(FYDIBOHF23SPDLT)/cn=Recipients/cn=f1949c9653024d3cb4aa4c2bd69c4fde-Berner, Ted]; Jarabek, Annie

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=8b1de54d48e1429c8129f6499211dbdb-Jarabek, Annie]; Jones, Samantha

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=eac77fe3b20c4667b8c534c90c15a830-Jones, Samantha]; Cowden, John

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=4cccc2629cb043e0901c6b5f61344e9c-Cowden, John]; Cote, Ila

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=8451c70416dc4c899ae0873b153fd592-Cote, IIa]

Subject: information on the EDF proposal for a joint NTP/EDF/EPA workshop on advancing the utilization of ToxCast and

Tox21 data

Attachments: EHP\_EDF\_21stcentchemtesting\_2014.pdf

I recently spoke with John Bucher about workshops and he informed me of an EDF proposal for a shared NTP/EPA/EDF

workshop to advance the utilization of Tox Cast and Tox21 data by interested academics. He said that Tina Bahadori was

the main EPA contact for the proposed workshop. I now have a little more information on what the plan is. The blog

below is about a commentary that EDF just published in EHP on Friday. I haven't contacted anyone in CSS. Just found out

about it. The recommendations in the commentary are:

**Discussion:** Environmental Defense Fund works across disciplines and with diverse groups to improve the science underlying environmental health decisions. We propose that EPA can strengthen the scientific foundation of its new chemical testing efforts and increase support for them in the scientific research community by (1) expanding and diversifying scientific input into the development and application of new chemical testing methods through collaborative workshops, and (2) seeking out mutually beneficial research partnerships.

The EHP commentary is attached and the blog is below. That's all I've got!



Lynn

## Building scientific bridges to support EPA's new chemical testing programs

By <u>Jennifer McPartland</u> | <u>Bio</u> | Published: October 24, 2014 <u>Jennifer McPartland</u>, <u>Ph.D.</u>, is a Health Scientist.

Readers of this blog are acutely aware of the <u>dearth of data</u> available for tens of thousands of chemicals in U.S. commerce today. This state of ignorance reflects legal and resource constraints as well as the "challenge" of continuously integrating advancements in our scientific understanding of human health and disease into the way we assess chemical toxicity.

Fortunately, <u>federal efforts to develop new chemical testing approaches</u>, such as the high-throughput screening programs ToxCast and Tox21, offer a great opportunity to narrow the data gap while also helping to shine light on how environmental chemicals can impact our health. But realizing the full potential of these new approaches will take a village.

Today in *Environmental Health Perspectives* we have published a <u>commentary</u> that calls for greater and more diverse engagement of the basic research community in developing and using the new federal chemical testing data. We also provide recommendations that we believe would help facilitate and improve such engagement. Read on to learn more.

The seminal National Research Council (NRC) report <u>Toxicity Testing in the 21st Century</u> (2007) emphasized the important role of the broader scientific community in achieving a paradigm shift in the way chemicals are evaluated

for potential toxicity. That report stated that, "The broad participation of the scientific community in the elaboration of the committee's vision for toxicity testing is essential for its success." (p. 180)

While the desire for such engagement may seem obvious, achieving it is proving to be anything but simple. EPA publicizes and hosts public meetings and monthly webinars on its chemical testing efforts, yet participation of basic environmental health researchers in these forums is low.

The challenge of attracting basic researchers even into science-heavy government initiatives is certainly not unique to current federal efforts to build state-of-the -art chemical testing programs. As a timely case in point, the EPA Integrated Risk Information System (IRIS) program announced last week that it will contract with the NRC to bolster the breadth of scientific input received during its bimonthly meetings, which have suffered from <a href="https://disable.com/highly/imbalanced">highly/imbalanced</a> stakeholder participation. The announcement notes: "The involvement of NRC experts will significantly contribute to broadening the range of perspectives represented at our public meetings. Science and scientific integrity are the backbone of every decision, policy, and action at EPA. The supplementation of our ongoing public meetings with independent experts identified by the NRC will help assure that overall a full and impartial representation of the science will serve as the foundation for the IRIS Program's assessments to protect human health." We couldn't agree more.

As a practical matter, a good part of the difficulty in attracting researchers into government initiatives is that they face competing priorities in a world of ever-dwindling research dollars. Compounding this resource reality is the fact that, unlike other stakeholders, research scientists don't necessarily have a direct vested interest in the outcomes of scientific government activities, which can feel quite removed from their professional lives.

This is not to suggest researchers don't care. I believe they do. I came from that world. Yet the real, and in many cases severe, pressures to secure funding, to develop and maintain active research programs, and to publish mean there is little time or motivation for many researchers to become involved in government testing initiatives. We believe direct incentives are presently lacking for that community to see the value of and utilize the tools and approaches of these initiatives in their own hypothesis-based research programs.

But there's good news. For those basic researchers studying environmental contributors to disease, there in fact is a real, tangible connection to the new federal chemical testing initiatives. EPA's ToxCast program and the interagency Tox21 program have generated <u>millions of data points</u> ripe—with guidance—for the research picking! Thousands of chemicals have been tested for activity across hundreds of biological targets. EPA has even developed a dashboard to help external parties navigate the massive data sets. Of course, the <u>data have limitations</u>, but we think there is opportunity for the data in synthesizing or refining hypothesizes or supplementing other types of data in studies.

The challenge and the opportunity that present themselves now are to: a) familiarize the research community with the databases and querying tools now publically available in online data files and interactive dashboards; and b) demonstrate more specifically how these emerging data may be useful in investigators' own scientific inquiries.

If we can make progress here, the results stand to benefit everyone. Among other benefits, EPA will gain expert input into and review of the emerging data and investigators can pursue new avenues of research that further understanding of environmental contributors to disease.

EDF is committed to helping to build bridges between the diverse scientific research community and federal chemical testing programs by expanding opportunities for engagement, inquiry, and collaboration. Our <u>commentary</u> expands on the topics raised here and describes in more depth our recommendations for moving forward.

Lynn Flowers, PhD, DABT Associate Director for Health National Center for Environmental Assessment US EPA Washington, DC 703-347-8537